IN THE SPECIFICATION:

Please amend the Specification as follows.

Please replace paragraph [0061] with the following amended paragraph:

[0061] Let us study the spatial whitening process performed in means ~~610~~ 612 in greater detail. The noise experienced on the main branch and the diversity branch is coloured. In other words, the covariance terms $cov_{ij} \neq 0$ if $i \neq j$. This is because the main branch noise and the diversity branch noise follow random processes, which are not statistically independent. To achieve statistical independence IRC decorrelates the noise on the main and diversity branches in a spatial dimension. The noise will then be white for the main and diversity branches. Effectively, IRC whitens the noise spatially.

Please replace paragraph [0064] with the following amended paragraph:

[0064] IRC requires the MRC step. This is ~~carrier~~ carried out at the end of the branch processing 526, 528, just before the trellis equalizer 534. The noise variance is re-estimated, and the signal and channel taps are scaled with the weighted noise standard deviation for the main and diversity branch.